## PRINTER RUSH (PTO ASSISTANCE)

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input data are separated by N/R data points. The FFT butterfly calculator also receives the appropriate twiddle factors that are stored in sequential locations in a bit reversed order in a second memory area. The FFT butterfly 5. calculator calculates a radix R butterfly calculation and stores the output data values in a third memory in the sequence in which they are calculated.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

The invention will be more fully understood from the following detailed description taken in conjunction with the accompanying drawings in which:

Fig. 1 is a schematic illustration of a signal flow diagram of a traditional FFT;

Fig. 2 is a block diagram illustrating an illustrative embodiment of the present invention;

Fig. 3 is a signal flow diagram illustrating the signal flow diagram of an exemplary FFT calculation stage of the present invention;

Fig. 4 is a signal flow diagram illustrating an FFT butterfly calculator;

Fig. 5 is a graphical illustration of the twiddle factors for an 8 point FFT;

Fig. 6 is a signal flow diagram for an 8 point FFT 25 consistent with the present invention; and

Fig. 7 is a table illustrating the storing of twiddle factors in bit reversed order.

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